CLAIMS

1. A method of manufacturing a conductive pattern, comprising the steps of:

(i) forming a molecular film of at least one kind of molecule on a part of a conductive film by placing, on the conductive film, a solution in which the at least one kind of molecule has been dissolved, the one kind of molecule being selected from the group consisting of:

a molecule that is expressed by Formula (1):

$CF_3(CF_2)_n(CH_2)_mSH$ ...(1),

where *n* indicates a natural number in a range of 3 to 7 while *m* denotes a natural number in a range of 8 to 18; and

a molecule that is expressed by Formula (2):

$CF_3(CF_2)_p(CH_2)_qSS(CH_2)_{q'}(CF_2)_{p'}CF_3$ ...(2),

where p and p' each are a natural number in a range of 3 to 7 independently while q and q' each are a natural number in a range of 8 to 18 independently, and

(ii) removing the conductive film located in a part where the molecular film has not been formed, by bringing the conductive film into contact with an etchant for the conductive film.

2. The method of manufacturing a conductive pattern according to claim 1, wherein the conductive film includes at least one selected from the group consisting of gold, silver, copper, platinum, gallium arsenide, and indium phosphide.

3. The method of manufacturing a conductive pattern according to claim 1, wherein the conductive film is formed on a resin substrate.

4. A method of manufacturing an electronic device including a conductive pattern, the method comprising the steps of:

(I) forming a molecular film of at least one kind of molecule on a part of a conductive film by placing, on the conductive film, a solution in which the at least one kind of molecule has been dissolved, the one kind of molecule being selected from the group consisting of:

a molecule that is expressed by Formula (1):

$CF_3(CF_2)_n(CH_2)_mSH$ ...(1),

where *n* indicates a natural number in a range of 3 to 7 while m denotes a natural number in a range of 8 to 18; and
a molecule that is expressed by Formula (2):
$CF_3(CF_2)_p(CH_2)_qSS(CH_2)_{q'}(CF_2)_{p'}CF_3$ ...(2),
where p and p' each are a natural number in a range of 3 to 7 independently while q and q' each are a natural number in a range of 8 to 18 independently, and

(II) forming the conductive pattern by bringing the conductive film into contact with an etchant for the conductive film and thereby removing the conductive film located in a part where the molecular film has not been formed.

5. The method of manufacturing an electronic device according to claim 4, wherein the conductive film includes at least one selected from the group consisting of gold, silver, copper, platinum, gallium arsenide, and indium phosphide.

6. The method of manufacturing an electronic device according to claim 4, wherein the conductive film is formed on a resin substrate.

7. The method of manufacturing an electronic device according to claim 4, wherein the electronic device is a field effect transistor and the conductive pattern comprises a source electrode and a drain electrode.

8. The method of manufacturing an electronic device according to claim 7, further comprising, after the step (II),

(III) forming an organic semiconductor film between the source electrode and the drain electrode by placing a solution between the source electrode and the drain electrode, the solution including an organic semiconductor material dissolved therein.

9. A electronic device including a conductive pattern, comprising a film of at least one kind of molecule selected from the group consisting of:
a molecule that is expressed by Formula (1):
$CF_3(CF_2)_n(CH_2)_mSH$ ...(1),
where *n* indicates a natural number in a range of 3 to 7 while *m* denotes a natural number in a range of 8 to 18; and

a molecule that is expressed by Formula (2):

$CF_3(CF_2)_p(CH_2)_qSS(CH_2)_{q'}(CF_2)_{p'}CF_3$ ...(2),

where p and p' each are a natural number in a range of 3 to 7 independently while q and q' each are a natural number in a range of 8 to 18 independently, the film being present on an upper surface of the conductive pattern.

10. The electronic device according to claim 9, wherein the conductive pattern serves as a source electrode and a drain electrode, and

the electronic device functions as a field effect transistor.

11. The electronic device according to claim 10, further comprising an organic semiconductor film disposed between the source electrode and the drain electrode.

12. The electronic device according to claim 10, wherein the electronic device is formed on a resin substrate.

13. The electronic device according to claim 11, wherein the organic semiconductor film and the source electrode are in contact with each other by only a side face of the source electrode, and

the organic semiconductor film and the drain electrode are in contact with each other by only a side face of the drain electrode